

In the Claims:

1. (Currently amended) A method of indexing content in an IP-based network comprising:-
 - (a) intercepting data traffic flowing in the network,
 - (b) extracting content identity information and associated destination location information from the data traffic flow,
 - (c) generating a mapping from a content item identified by the extracted identity information to at least one destination location identified by the associated destination location information, and
 - (d) storing the mapping in a content index database which is operable to provide an instance mapping containing a list of destination locations in response to an instance request containing a content identity.
2. (Currently amended) A method according to claim 1, wherein the step of intercepting data traffic is carried out by intercepting data traffic flowing into a cache, and wherein the method further comprises advertising the content identities for which mappings are stored in the content index by sending advertising messages to a predetermined location in the network.
3. (Currently amended) A method according to claim 2, wherein the method further comprises recording the time of data traffic flows into the cache which are related to a particular content item and calculating the time period between a first flow of the content item into the cache and a subsequent flow of the content item into the cache thereby to assess how long items are held in the cache before they are expired and deleting the mapping relating to that content item when that content item is judged to have expired in the cache.
4. (Currently amended) A method according to claim 1, wherein the step of intercepting data traffic is carried out by intercepting data traffic flowing out of an original content source.

5. (Original) A method according to claim 4, wherein the method further comprises receiving an advertising message which advertises a mapping generated elsewhere on the network and which is related to content items stored in the original content source, and augmenting the content index using information contained in the advertising message.
6. (Currently amended) A method according to claim 1 wherein the step of intercepting data traffic is carried out by intercepting content requests issued by a cache, and wherein the method further comprises advertising the content identities for which mappings are stored in the content index by sending advertising messages to a predetermined location in the network.
7. (Withdrawn) A method of retrieving content in an IP-based network comprising the steps of:-
 - (a) intercepting a content request containing information related to the identity of -